

AMENDMENT TO SPECIFICATION

TITLE OF THE INVENTION

Please change the title of the invention to read:

AN OPTICAL WAVEGUIDE DEVICE

Please amend the paragraph beginning on page 13, line 22, ending on page 14, line 15 as follows:

The optical fiber 4 is fixed by adhesion with an adhesive to a pair of the ends 2b and 2c of the arm portions of the U-shaped member 2. Specifically, the optical fiber 4 is fixed with an adhesive at both sides of the diffraction grating portion 8 to the ends of the arm portions 2b and 2c in a state such that a predetermined tension is given to the diffraction grating portion 8 while the center wavelength of diffraction grating portion 8 is monitored. When the optical fiber 4 is fixed in this manner, the diffraction grating portion 8 of the optical fiber 4 and the U-shaped member 2 are heated to a predetermined temperature: a hardening temperature when the adhesive is a heat curable resin, and when the adhesive is an ultraviolet ray curable resin, a temperature at which the viscosity of the resin becomes sufficiently low to give good wettability to the resin. By fitting the optical fiber 4 to the U-shaped member 2 in this way, the tension applied to the optical fiber 4 is maintained at a suitable value in a an operating temperature range (-45°C to 80°C) of the optical device 1. Consequently, it is possible to maintain the stability of the center wavelength of reflection against the temperature variation at the diffraction grating portion 8.

Please amend the paragraph beginning on page 19, line 7, as follows:

The optical fiber 4 is adhered to the ends of the first members 22 with an adhesive. Specifically, the optical fiber 4 is fixed with an adhesive at both sides of the diffraction grating

portion 8 to one end of the respective first members 22 in a state such that a predetermined tension is given to the diffraction grating portion 8 while the center wavelength of diffraction grating portion 8 is monitored. When the optical fiber 4 is fixed in this manner, the first members 22 and the diffraction grating portion 8 of the optical fiber 4 are heated to a predetermined temperature: a curing temperature when the adhesive is a heat-curable resin, and when the adhesive is an ultraviolet ray curable resin, a temperature at which the viscosity of the resin becomes sufficiently low to give good wettability to the resin. By fitting the optical fiber 4 to the first members 22 in this way, the tension applied to the optical fiber 4 is maintained at a suitable value in a an operating temperature range (-45°C to 80°C) of the optical device 1. Consequently, it is possible to maintain the stability of the center wavelength of reflection against the temperature variation at the diffraction grating portion 8.